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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,180	06/24/2003	Scott P. Campbell		9962
7.	7590 09/01/2004		EXAMINER	
Scot A Reader PC			CHOI, WILLIAM C	
1320 Pearl Stre Suite 228	et		ART UNIT	PAPER NUMBER
Boulder, CO	80302		2873	
			DATE MAILED: 09/01/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/602,180	CAMPBELL, SC	OTT P.		
Office Action Summary	Examiner	Art Unit	T		
	William C. Choi	2873			
The MAILING DATE of this communication ap			ddress		
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a r ply within the statutory minimum of thir d will apply and will expire SIX (6) MON te, cause the application to become AE	eply be timely filed by (30) days will be considered time THS from the mailing date of this BANDONED (35 U.S.C. § 133).	aly. communication.		
Status					
1) Responsive to communication(s) filed on	·•				
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ Th	is action is non-final.				
3) Since this application is in condition for allow	ance except for formal matt	ers, prosecution as to th	e merits is		
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	). 11, 453 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1-25 is/are pending in the applicatio	n.				
4a) Of the above claim(s) is/are withdr	awn from consideration.				
5)⊠ Claim(s) <u>1-13 and 20-25</u> is/are allowed.					
6)⊠ Claim(s) <u>14 and 17-19</u> is/are rejected.					
8) Claim(s) are subject to restriction and	or election requirement.				
Application Papers					
9)⊠ The specification is objected to by the Examir	ner.				
10) The drawing(s) filed on 24 June 2003 is/are:	a)⊠ accepted or b)□ obje	cted to by the Examiner			
Applicant may not request that any objection to th	e drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the corre					
11) The oath or declaration is objected to by the B	Examiner. Note the attached	d Office Action or form P	TO-152.		
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreignal All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> </ul>	nts have been received.				
3. Copies of the certified copies of the pri	iority documents have been	received in this Nationa	ıl Stage		
application from the International Bure	au (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list	st of the certified copies not	received.			

4) Interview Summary (PTO-413) Paper No(s)/Mail Date. \_

6) Other:

5) Notice of Informal Patent Application (PTO-152)

U.S. Patent and Trademark Office

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date \_

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

Attachment(s)

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#### **DETAILED ACTION**

## **Priority**

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

## Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally **limited to a single** paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 14 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Xia et al (U.S. 2002/0181106 A1).

In regard to claim 14, Xia et al discloses a method for using length dispersion of an etalon (page 6, section [0060], Figure 11), comprising: determining a length dispersion of an etalon (page 6, section [0060], lines 6-10); and selecting the etalon for application in an optical system based at least in part on the length dispersion of the etalon (page 6, section [0063], Figure 11, "1106").

Regarding claims 17-19, Xia et al discloses wherein the length dispersion determination is based at least in part on a refractive index step of a dielectric stack of the etalon, a number of layers of a dielectric stack of the etalon and a thickness of layers of a dielectric stack of the etalon (page 6, section [0063], Figure 11).

#### Allowable Subject Matter

Claims 1-13 and 20-25 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claims 1-5: a method for using a length dispersion of an etalon as claimed, specifically comprising selecting an etalon having a plurality of resonant frequencies which approximate target resonant frequencies based at least in part in consideration of a length dispersion of the etalon.

The prior art fails to teach a combination of all the claimed features as presented in claims 6-13: a method for using a length dispersion of an etalon as claimed,

specifically comprising selecting a length dispersion for the etalon suitable to cooperate with a material dispersion to produce a plurality of resonant frequencies which approximate target resonant frequencies.

The prior art fails to teach a combination of all the claimed features as presented in claims 20-25: a method for using a length dispersion of an etalon as claimed, specifically comprising determining an impact of a length dispersion of the etalon on a plurality of resonant frequencies of the etalon, comparing the plurality of resonant frequencies of the etalon with a plurality of target resonant frequencies and selecting the etalon for application in an optical system based at least in part on a result of the comparison.

Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claims 15 and 16: a method for using a length dispersion of an etalon as claimed, specifically comprising determining an impact of the length dispersion of the etalon on a plurality of resonant frequencies of the etalon.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Choi whose telephone number is (571) 272-

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2324. The examiner can normally be reached on Monday-Friday from about 9:00 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

کریں William Choi Patent Examiner Art Unit 2873 August 25, 2004

Georgia Epps
Supervisory Patent Examiner
Technology Center 2800